

**WEST***West*[Help](#)[Logout](#)[Interrupt](#)[Main Menu](#)[Search Form](#)[Posting Counts](#)[Show S Numbers](#)[Edit S Numbers](#)[Preferences](#)**Search Results -**

Terms	Documents
113 and (quil or quila or quil-a)	3

**Database:**

US Patents Full-Text Database  
US Pre-Grant Publication Full-Text Database  
JPO Abstracts Database  
EPO Abstracts Database  
Derwent World Patents Index  
IBM Technical Disclosure Bulletins

**Refine Search:**

113 and (quil or quila or quil-a)

[Clear](#)**Search History****Today's Date: 12/6/2001**

<u>DB Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
USPT	bvh\$	98	<u>L1</u>
USPT	I1 and streptoc\$	0	<u>L2</u>
USPT	bvh-3	0	<u>L3</u>
USPT	streptococ\$.ti,ab,clm.	1370	<u>L4</u>
USPT	I4 and (peptide or polypeptide or poly-peptide or protein)	1049	<u>L5</u>
USPT	I5 and vaccin\$	428	<u>L6</u>
USPT	I5 and vaccin\$.clm.	106	<u>L7</u>
USPT	(I6 or I7) and pneumon\$	280	<u>L8</u>
USPT	(I6 or I7) and pneumon\$.clm.	154	<u>L9</u>
USPT	I9 and (peptide or polypeptide or poly-peptide or protein).clm.	108	<u>L10</u>
USPT	I10 and I1	0	<u>L11</u>
USPT	I1 and pneumon\$	0	<u>L12</u>
USPT	I7 and I10	29	<u>L13</u>
USPT	I13 and (quill or quilla or quill-a)	3	<u>L14</u>

**WEST****Search Results - Record(s) 1 through 3 of 3 returned.**

L15: Entry 1 of 3

File: USPT

Jul 17, 2001

US-PAT-NO: 6262029

DOCUMENT-IDENTIFIER: US 6262029 B1

TITLE: Chemically modified saponins and the use thereof as adjuvants

DATE-ISSUED: July 17, 2001

US-CL-CURRENT: 514/26; 424/184.1, 424/204.1, 424/234.1, 514/23, 536/18.6, 536/5

INT-CL: [7] A61K 31/70, A61K 39/00, C07H 15/24

L15: Entry 2 of 3

File: USPT

Jun 27, 2000

US-PAT-NO: 6080725

DOCUMENT-IDENTIFIER: US 6080725 A

TITLE: Immunostimulating and vaccine compositions employing saponin analog adjuvants and uses thereof

DATE-ISSUED: June 27, 2000

US-CL-CURRENT: 514/26; 424/184.1, 514/25, 536/4.1, 536/5

INT-CL: [7] A61K 31/705, A61K 39/00

L15: Entry 3 of 3

File: USPT

Aug 29, 1995

US-PAT-NO: 5445817

DOCUMENT-IDENTIFIER: US 5445817 A

TITLE: Pertussis toxin used as a carrier protein with non-charged saccharides in conjugate vaccines

DATE-ISSUED: August 29, 1995

US-CL-CURRENT: 424/194.1; 424/197.11, 424/240.1, 424/244.1, 424/831, 530/402, 530/403

INT-CL: [6] A61K 39/385, A61K 39/09, A61K 39/10

STEM:HOME

Cost is in DialUnits

Menu System II: D2 version 1.7.8 term=ASCII

\*\*\* DIALOG HOMEBASE(SM) Main Menu \*\*\*

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Enter an option number to view information or to connect to an online service. Enter a BEGIN command plus a file number to search a database (e.g., B1 for ERIC).

?b 155

06dec01 12:59:44 User228206 Session D1636.1  
\$0.00 0.206 DialUnits FileHomeBase  
\$0.00 Estimated cost FileHomeBase  
\$0.00 Estimated cost this search  
\$0.00 Estimated total session cost 0.206 DialUnits

File 155:MEDLINE(R) 1966-2001/Dec W5

Set	Items	Description
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?s streptoc? and vaccin? and (saponin? or quil? or quila?)

58652	STREPTOC?
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111855	VACCIN?
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5393	SAPONIN?
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691	QUIL?
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13	QUILA?
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S1	4	STREPTOC? AND VACCIN? AND (SAPONIN? OR QUIL? OR QUILA?)
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?t s1/9/all

1/9/1

DIALOG(R)File 155:MEDLINE(R)

11135505 21082588 PMID: 11214671

**Antibody response in sheep following immunization with Streptococcus bovis in different adjuvants.**

Shu Q; Bir SH; Gill HS; Duan E; Xu Y; Hiliard; Rowe JB

Division of Animal Science, University of New England, Armidale, NSW, Australia. Q.Shu@massey.ac.nz

Veterinary research communications (Netherlands) Jan 2001, 25 (1)  
p43-54, ISSN 0165-7380 Journal Code: XCD

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

Subfile: INDEX MEDICUS

Recent studies have shown that immunization with **Streptococcus bovis** using Freund's complete adjuvant (FCA) may confer protection against lactic acidosis in sheep. The major objective of this study was to compare the antibody responses to *S. bovis* in a practically acceptable adjuvant (Freund's incomplete adjuvant (FIA); **Quila** ; dextran sulphate (Dex); Imject Alum; or Gerbu) and in FCA. Thirty-five sheep were randomly

allocated to 7 treatment groups. Six groups were immunized with *S. bovis* in an adjuvant; the other group served as the non-immunization control. The primary immunization was administered intramuscularly on day 0, followed by a booster injection on day 28. Immunization with FCA induced the highest saliva and serum antibody responses. The saliva antibody concentrations in the FIA and **Quila** groups were significantly higher than those in the Alum, Dex and Gerbu groups ( $p < 0.01$ ). The serum antibody concentration in the FIA group was significantly higher than those in the **Quila**, Alum, Dex and Gerbu groups ( $p < 0.01$ ). Immunization enhanced the antibody level in faeces ( $p < 0.05$ ), but there was no significant difference between the different adjuvant groups ( $p > 0.05$ ). Seven and 14 days following booster immunization, the saliva antibody levels induced by **Quila** and/or FIA were comparable with the level stimulated by FCA ( $p > 0.05$ ). There was a strongly positive correlation ( $R^2 = 0.770$ ,  $p < 0.01$ ) between the antibody concentrations in salivary and serum. Compared with the controls, a higher faecal dry matter content was observed in the animals immunized with either FCA or **Quila**. The change in faecal dry matter content was positively associated with the faecal antibody concentration ( $R^2 = 0.441$ ,  $p < 0.05$ ). These results indicate that FIA and **Quila** were effective at inducing high levels of antibody responses to *S. bovis*, and suggest that either Freund's incomplete adjuvant or **Quila** may be useful for preparing a practically acceptable vaccine against lactic acidosis.

Tags: Animal; Comparative Study; Male

Descriptors: Adjuvants, Immunologic--administration and dosage--AD; \*Antibodies, Bacterial--biosynthesis--BI; \*Bacterial Vaccines --immunology --IM; \*Sheep--immunology--IM; \* **Streptococcus** bovis--immunology--IM; \* **Vaccination** --veterinary--VE; Alum Compounds--administration and dosage --AD; Antibodies, Bacterial--analysis--AN; Antibodies, Bacterial--blood --BL; Bacterial Vaccines --administration and dosage--AD; Dextran --administration and dosage--AD; Enzyme-Linked Immunosorbent Assay --veterinary--VE; Feces--chemistry--CH; Freund's Adjuvant--administration and dosage--AD; Injections, Intramuscular--veterinary--VE; Random Allocation; Saliva--immunology--IM; **Saponins** --administration and dosage --AD; **Streptococcus** bovis--physiology--PH; **Vaccination** --methods--MT

CAS Registry No.: 0 (Adjuvants, Immunologic); 0 (Alum Compounds); 0 (Antibodies, Bacterial); 0 (Bacterial Vaccines); 0 (Saponins); 10043-01-3 (aluminum sulfate); 66594-14-7 (Quil A); 9004-54-0 (Dextran); 9007-81-2 (Freund's Adjuvant)

Record Date Created: 20010214

1/9/2

DIALOG(R) File 155:MEDLINE(R)

10835903 20352794 PMID: 10895910

**Effects of various adjuvants on efficacy of a vaccine against Streptococcus bovis and Lactobacillus spp in cattle.**

Shu Q; Hillard MA; Bindon BM; Duan E; Xu Y; Bird SH; Rowe JB; Oddy VH; Gill HS

Department of Animal Science and the Cooperative Research Centre for Cattle and Beef Industry, University of New England, Armidale, NSW, Australia.

American journal of veterinary research (UNITED STATES) Jul 2000, 61 (7) p839-43, ISSN 0002-9645 Journal Code: 40C

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

Subfile: INDEX MEDICUS

OBJECTIVE: To determine efficacy of vaccines incorporating **Quila**, alum, dextran combined with mineral oil, or Freund adjuvant for immunization of feedlot cattle against **Streptococcus** bovis and Lactobacillus spp. ANIMALS: 24 steers housed under feedlot conditions. PROCEDURE: Steers were randomly assigned to 4 experimental groups and a control group. Animals in experimental groups were inoculated on days 0 and 26 with vaccines containing Freund adjuvant (FCA), **Quila**, dextran combined with mineral oil (Dex), or alum as adjuvant. Serum anti-*S. bovis* and anti-Lactobacillus IgG concentrations were measured, along with fecal

pH, ruminal fluid pH, and number of *S bovis* and *Lactobacillus* spp in ruminal fluid. RESULTS: Throughout the study, serum anti-*S bovis* and anti-*Lactobacillus* IgG concentrations for animals in the Dex, **Quila**, and alum groups were similar to or significantly higher than concentrations for animals in the FCA group. Serum anti-*S bovis* and anti-*Lactobacillus* IgG concentrations were significantly increased on days 26 through 75 in all 4 experimental groups, and there was a linear relationship between anti-*S bovis* and anti-*Lactobacillus* IgG concentrations. For animals in the **Quila** and Dex groups, mean pH of feces throughout the period of experiment were significantly higher and numbers of *S bovis* and *Lactobacillus* spp in ruminal fluid on day 47 were significantly lower than values for control cattle. CONCLUSIONS AND CLINICAL RELEVANCE: Results suggest that immunization of feedlot steers against *S bovis* and *Lactobacillus* spp with **vaccines** incorporating Freund adjuvant, **Quila**, dextran, or alum as an adjuvant effectively induced high, long-lasting serum anti-*S bovis* and anti-*Lactobacillus* IgG concentrations. Of the adjuvants tested, dextran may be the most effective.

Tags: Animal; Comparative Study; Male

Descriptors: Adjuvants, Immunologic--standards--ST; \*Bacterial **Vaccines** --standards--ST; \*Cattle Diseases--immunology--IM; \**Lactobacillus* --immunology--IM; \* **Streptococcal** Infections--veterinary--VE; \* **Streptococcus** *bovis*--immunology--IM; Adjuvants, Immunologic --administration and dosage--AD; Alum Compounds--administration and dosage --AD; Alum Compounds--standards--ST; Analysis of Variance; Antibodies, Bacterial--biosynthesis--BI; Antibodies, Bacterial--blood--BL; Anticoagulants--administration and dosage--AD; Anticoagulants--standards--ST; Bacterial **Vaccines** --administration and dosage--AD; Bacterial **Vaccines** --immunology--IM; Body Weight; Cattle; Cattle Diseases--microbiology--MI; Cattle Diseases--prevention and control--PC; Dextran--administration and dosage--AD; Dextran--standards--ST; Feces--microbiology--MI; Freund's Adjuvant--administration and dosage--AD; Freund's Adjuvant--standards--ST; Hydrogen-Ion Concentration; IgG--biosynthesis--BI; IgG--blood--BL; Linear Models; Random Allocation; Rumen--microbiology--MI; **Saponins** --administration and dosage--AD; **Saponins** --standards--ST; **Streptococcal** Infections--blood--BL; **Streptococcal** Infections--immunology--IM; **Streptococcal** Infections--prevention and control--PC; **Streptococcal Vaccines** --administration and dosage--AD; **Streptococcal Vaccines** --immunology--IM; **Streptococcal Vaccines** --standards--ST; Vaccination --veterinary--VE

CAS Registry No.: 0 (Adjuvants, Immunologic); 0 (Alum Compounds); 0 (Antibodies, Bacterial); 0 (Anticoagulants); 0 (Bacterial Vaccines); 0 (IgG); 0 (Saponins); 0 (Streptococcal Vaccines); 10043-01-3 (aluminum sulfate); 66594-14-7 (Quil A); 9004-54-0 (Dextran); 9007-81-2 (Freund's Adjuvant)

Record Date Created: 20001103

1/9/3

DIALOG(R) File 155:MEDLINE(R)

08565273 95348563 PMID: 7622906

**Anti-polysaccharide immunoglobulin isotype levels and opsonic activity of antisera: relationships with protection against *Streptococcus pneumoniae* infection in mice.**

Alonso De Velasco E; Dekker BA; Verheul AF; Feldman RG; Verhoef J; Snippe H

Eijkman-Winkler Institute for Medical and Clinical Microbiology, Utrecht University, Netherlands.

Journal of infectious diseases (UNITED STATES) Aug 1995, 172 (2) p562-5, ISSN 0022-1899 Journal Code: IH3

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

Subfile: AIM; INDEX MEDICUS

Relationships between in vitro parameters (opsonic activity and anti-pneumococcal polysaccharide [PS] antibody subclasses) and in vivo mouse protection were established by logistic regression analysis. Data

were from 158 mice challenged with pneumococci after **vaccination** with synthetic oligosaccharide- and PS-protein conjugates in combination with the adjuvant **Quil A**. The hypothesis that serum opsonic activity has predictive value for protection against pneumococcal infection was tested. Serum opsonic activity was well correlated with protection ( $\chi^2 = 35.5$ ,  $P < 0.001$ ), although a stronger correlation was observed for anti-PS IgM and IgG. The combined use of IgG and opsonic activity as predictor variables yielded the best fitting model for predicting protection ( $\chi^2 = 74.1$ ,  $P < 0.001$ ). When opsonic activity data were added to models that included various antibody isotypes, the statistical significance of the models was enhanced. Thus, the opsonic activity of antisera induced by pneumococcal **vaccines** can predict mouse protection.

Tags: Animal; Female

Descriptors: Antibodies, Bacterial--blood--BL; \*Immunoglobulin Isotypes --blood--BL; \* **Streptococcus** pneumoniae--immunology--IM; Adjuvants, Immunologic; Antigens, Bacterial--immunology--IM; Bacterial **Vaccines** --immunology--IM; Mice; Mice, Inbred BALB C; Opsonins--blood--BL; Pneumococcal Infections--immunology--IM; Pneumococcal Infections --microbiology--MI; Pneumococcal Infections--mortality--MO; Polysaccharide s, Bacterial--immunology--IM

CAS Registry No.: 0 (Adjuvants, Immunologic); 0 (Antibodies, Bacterial); 0 (Antigens, Bacterial); 0 (Bacterial Vaccines); 0 (Immunoglobulin Isotypes); 0 (Opsonins); 0 (Polysaccharides, Bacterial); 0 (pneumococcal polysaccharide type 17F)

Record Date Created: 19950830

1/9/4

DIALOG(R) File 155:MEDLINE(R)

08359028 95193317 PMID: 7887020

**Adjuvant Quil A improves protection in mice and enhances opsonic capacity of antisera induced by pneumococcal polysaccharide conjugate vaccines.**

DeVelasco EA; Dekker HA; Antal P; Jalink KP; van Strijp JA; Verheul AF; Verhoef J; Snippe H

Eijkman-Winkler Institute of Medical Microbiology, Utrecht University, The Netherlands.

Vaccine (ENGLAND) Nov 1994, 12 (15) p1419-22, ISSN 0264-410X

Journal Code: X60

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

Subfile: INDEX MEDICUS

The adjuvant effect of **Quil A** on the primary antibody response of mice to pneumococcal capsular polysaccharide conjugates was examined. **Quil A** increased the anti-capsular polysaccharide antibody titres, the protection against **Streptococcus** pneumoniae, and the opsonic capacity of the antibodies as measured in a newly developed in vitro phagocytosis assay, using the mouse macrophage cell line J774.

Tags: Animal

Descriptors: Adjuvants, Immunologic--pharmacology--PD; \*Bacterial **Vaccines** --immunology--IM; \*Opsonins--immunology--IM; \* **Saponins** --pharmacology--PD; \***Streptococcus** pneumoniae--immunology--IM; Cell Line; Immune Sera--immunology--IM; Macrophages--immunology--IM; Mice; Mice, Inbred BALB C; Phagocytosis--immunology--IM; Polysaccharides--immunology--IM

CAS Registry No.: 0 (Adjuvants, Immunologic); 0 (Bacterial Vaccines); 0 (Immune Sera); 0 (Opsonins); 0 (Polysaccharides); 0 (Saponins); 66594-14-7 (Quil A)

Record Date Created: 19950413

?logoff hold

06dec01 12:59:59 User228206 Session D1636.2

\$1.38 0.432 DialUnits File155

\$0.80 4 Type(s) in Format 9

\$0.80 4 Types

\$2.18 Estimated cost File155

\$0.05 TYMNET  
\$2.23 Estimated cost this search  
\$2.23 Estimated total session cost 0.638 DialUnits

### Status: Signed Off. (1 minutes)



our SELECT statement is:

s (pneumoni? or pneumonococ?) and vaccin? and (protein or polypeptide or peptide? or amino) and (quila? or saponin? or quil)

Items	File
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### Status: Break Sent.

?s (pneumoni? or pneumonococ?) and vaccin? and (protein or polypeptide or peptide? or amino) and (quila? or saponin? or quil)

Your SELECT statement is:

s (pneumoni? or pneumonococ?) and vaccin? and (protein or polypeptide or peptide? or amino) and (quila? or saponin? or quil)

Items	File
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3	5: Biosis Previews(R)_1969-2001/Dec W1
1	9: Business & Industry(R)_Jul/1994-2001/Dec 05
2	16: Gale Group PROMT(R)_1990-2001/Dec 05
6	34: SciSearch(R) Cited Ref Sci_1990-2001/Dec W2
1	47: Gale Group Magazine DB(TM)_1959-2001/Dec 05
2	71: ELSEVIER BIOBASE_1994-2001/Dec W1
5	73: EMBASE_1974-2001/Dec W1
3	76: Life Sciences Collection_1982-2001/Nov

### Status: Break Sent.

?s (pneumoni? or pneumococ?) and vaccin? and (protein or polypeptide or peptide? or amino) and (quila? or saponin? or quil)

Your SELECT statement is:

s (pneumoni? or pneumococ?) and vaccin? and (protein or polypeptide or peptide? or amino) and (quila? or saponin? or quil)

Items	File
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3	5: Biosis Previews(R)_1969-2001/Dec W1
2	9: Business & Industry(R)_Jul/1994-2001/Dec 05
4	16: Gale Group PROMT(R)_1990-2001/Dec 05
6	34: SciSearch(R) Cited Ref Sci_1990-2001/Dec W2
2	47: Gale Group Magazine DB(TM)_1959-2001/Dec 05
2	71: ELSEVIER BIOBASE_1994-2001/Dec W1
5	73: EMBASE_1974-2001/Dec W1
3	76: Life Sciences Collection_1982-2001/Nov
Examined 50 files	
1	98: General Sci Abs/Full-Text_1984-2001/Oct
1	129: PHIND(Archival)_1980-2001/Dec W1
2	144: Pascal_1973-2001/Dec W1
4	148: Gale Group Trade & Industry DB_1976-2001/Dec 05
6	149: TGG Health&Wellness DB(SM)_1976-2001/Nov W3
1	155: MEDLINE(R)_1966-2001/Dec W5
1	180: Federal Register_1985-2001/Dec 05
Examined 100 files	
1	315: ChemEng & Biotec Abs_1970-2001/Oct
Examined 150 files	
4	340: CLAIMS(R)/US Patent_1950-01/Dec 04
57	348: EUROPEAN PATENTS_1978-2001/NOV W04
439	349: PCT FULLTEXT_1983-2001/UB=20011129,UT=20011122
1	357: Derwent Biotechnology Abs_1982-2001/Jan B1
2	390: Beilstein Online
6	399: CA SEARCH(R)_1967-2001/UD=13524
9	440: Current Contents Search(R)_1990-2001/Dec W3
1	442: AMA Journals_1982-2001/Dec B1
1	449: IMSWorld Company Profiles_1992-2001/Nov
1	457: The Lancet_1986-2000/Oct W1

1 459: Daily Essentials (Archival) 1996-2001/Nov W2  
 4 484: Periodical Abs Plustext 1986-2001/Dec W1  
 Examined 200 files  
 2 570: Gale Group MARS(R) 1984-2001/Dec 05  
 1 621: Gale Group New Prod. Annou. (R) 1985-2001/Dec 05  
 2 636: Gale Group Newsletter DB(TM) 1987-2001/Dec 05  
 1 649: Gale Group Newswire ASAP(TM) 2001/Dec 06  
 Examined 250 files  
 3 652: US Patents Fulltext 1971-1979  
 32 653: US Patents Fulltext 1980-1989  
 268 654: US PAT.FULL. 1990-2001/Dec 04  
 1 813: PR Newswire 1987-1999/Apr 30

36 files have one or more items; file list includes 288 files.

?save temp

Temp SearchSave "TD453" stored

?rf

Your last SELECT statement was:

S (PNEUMONI? OR PNEUMOCOC?) AND VACCIN? AND (PROTEIN OR POLYPEPTIDE OR -  
 PEPTIDE? OR AMINO) AND (QUILA? OR SAPONIN? OR QUIL)

Ref	Items	File
N1	439	349: PCT FULLTEXT 1983-2001/UB=20011129,UT=20011122
N2	268	654: US PAT.FULL. 1990-2001/Dec 04
N3	57	348: EUROPEAN PATENTS 1978-2001/NOV W04
N4	32	653: US Patents Fulltext 1980-1989
N5	9	440: Current Contents Search(R) 1990-2001/Dec W3
N6	6	34: SciSearch(R) Cited Ref Sci 1990-2001/Dec W2
N7	6	149: TGG Health&Wellness DB(SM) 1976-2001/Nov W3
N8	6	399: CA SEARCH(R) 1967-2001/UD=13524
N9	5	73: EMBASE 1974-2001/Dec W1
N10	4	16: Gale Group PROMT(R) 1990-2001/Dec 05

36 files have one or more items; file list includes 288 files.

- Enter P or PAGE for more -

?p

Your last SELECT statement was:

S (PNEUMONI? OR PNEUMOCOC?) AND VACCIN? AND (PROTEIN OR POLYPEPTIDE OR -  
 PEPTIDE? OR AMINO) AND (QUILA? OR SAPONIN? OR QUIL)

Ref	Items	File
N11	4	148: Gale Group Trade & Industry DB 1976-2001/Dec 05
N12	4	340: CLAIMS(R)/US Patent 1950-01/Dec 04
N13	4	484: Periodical Abs Plustext 1986-2001/Dec W1
N14	3	5: Biosis Previews(R) 1969-2001/Dec W1
N15	3	76: Life Sciences Collection 1982-2001/Nov
N16	3	652: US Patents Fulltext 1971-1979
N17	2	9: Business & Industry(R) Jul/1994-2001/Dec 05
N18	2	47: Gale Group Magazine DB(TM) 1959-2001/Dec 05
N19	2	71: ELSEVIER BIOBASE 1994-2001/Dec W1
N20	2	144: Pascal 1973-2001/Dec W1

36 files have one or more items; file list includes 288 files.

- Enter P or PAGE for more -

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Your last SELECT statement was:

S (PNEUMONI? OR PNEUMOCOC?) AND VACCIN? AND (PROTEIN OR POLYPEPTIDE OR -  
 PEPTIDE? OR AMINO) AND (QUILA? OR SAPONIN? OR QUIL)

Ref	Items	File
N21	2	390: Beilstein Online
N22	2	570: Gale Group MARS(R) 1984-2001/Dec 05
N23	2	636: Gale Group Newsletter DB(TM) 1987-2001/Dec 05
N24	1	98: General Sci Abs/Full-Text 1984-2001/Oct
N25	1	129: PHIND(Archival) 1980-2001/Dec W1
N26	1	155: MEDLINE(R) 1966-2001/Dec W5

N27 1 180: Federal Register\_1985-2001/Dec 05  
 N28 1 315: ChemEng & Biotec\_Abs\_1970-2001/Oct  
 N29 1 357: Derwent Biotechnology\_Abs\_1982-2001/Jan B1  
 N30 1 442: AMA Journals\_1982-2001/Dec B1

36 files have one or more items; file list includes 288 files.

- Enter P or PAGE for more -

?p

Your last SELECT statement was:

S (PNEUMONI? OR PNEUMOCOC?) AND VACCIN? AND (PROTEIN OR POLYPEPTIDE OR -  
 PEPTIDE? OR AMINO) AND (QUILA? OR SAPONIN? OR QUIL)

Ref	Items	File
N31	1	449: IMSWorld Company Profiles_1992-2001/Nov
N32	1	457: The Lancet_1986-2000/Oct W1
N33	1	459: Daily Essentials (Archival)_1996-2001/Nov W2
N34	1	621: Gale Group New Prod.Annou.(R)_1985-2001/Dec 05
N35	1	649: Gale Group Newswire ASAP(TM)_2001/Dec 06
N36	1	813: PR Newswire_1987-1999/Apr 30
N37	0	2: INSPEC_1969-2001/Dec W1
N38	0	6: NTIS_1964-2001/Dec W3
N39	0	8: Ei Compendex(R)_1970-2001/Dec W1
N40	0	10: AGRICOLA_70-2001/Nov

36 files have one or more items; file list includes 288 files.

- Enter P or PAGE for more -

?p

Your last SELECT statement was:

S (PNEUMONI? OR PNEUMOCOC?) AND VACCIN? AND (PROTEIN OR POLYPEPTIDE OR -  
 PEPTIDE? OR AMINO) AND (QUILA? OR SAPONIN? OR QUIL)

Ref	Items	File
N41	0	14: Mechanical Engineering Abs_1973-2001/Nov
N42	0	15: ABI/Inform(R)_1971-2001/Dec 06
N43	0	18: Gale Group F&S Index(R)_1988-2001/Dec 04
N44	0	19: Chem.Industry Notes_1974-2001/ISS 200148
N45	0	20: World Reporter_1997-2001/Dec 06
N46	0	25: Weldasearch_1966-2001/Apr
N47	0	28: Oceanic Abst._1964-2001/Nov
N48	0	29: Meteor.& Geoastro.Abs._1970-2001/Dec
N49	0	31: World Surface Coatings_Abs_1976-2001/Dec
N50	0	32: METADEX(R)_1966-2001/Feb B1

36 files have one or more items; file list includes 288 files.

- Enter P or PAGE for more -

?b n2 n1 n3:n36;exs

06dec01 13:08:13 User228206 Session D1636.4

\$9.46 7.569 DialUnits File411

\$9.46 Estimated cost File411

\$0.30 TYMNET

\$9.76 Estimated cost this search

\$9.99 Estimated total session cost 7.642 DialUnits

## Status: Break Sent.

12/1/07

?ds

Set	Items	Description
S1	880	(PNEUMONI? OR PNEUMOCOC?) AND VACCIN? AND (PROTEIN OR POLY- PEPTIDE OR PEPTIDE? OR AMINO) AND (QUILA? OR SAPONIN? OR QUIL)
S2	844	RD (unique items)
S3	468	S2/1999:2001
S4	376	S2 NOT S3
?t s4/free/300-376		

DIALOG Accession Number: 02002041

Supplier Number: 850103047

**Biological Products; Allergenic Extracts; Implementation of Efficacy Review**

Date: WEDNESDAY, JANUARY 23, 1985

Word Count: 205773

**4/8/373 (Item 1 from file: 315)**

421676

**Aquila's QS-21 adjuvant enhances DNA vaccine immune response.**

PUBLICATION DATE: 21 May 1997 (970521)

**4/8/374 (Item 1 from file: 442)**

DIALOG(R) File 442:(c)2001 Amer Med Assn -FARS/DARS apply. All rts. reserv.

00021899

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**Some Late Reports From the Front in War Against Various Sexually Transmitted Diseases (MEDICAL NEWS & PERSPECTIVES)**

LINE COUNT: 00132

WORD COUNT: 01830

**4/8/375 (Item 1 from file: 449)**

00021083 (USE FORMAT 7 FOR FULLTEXT)

**SMITHKLINE BEECHAM: R&D PROFILE : SYSTEMIC ANTI-INFECTIVE AGENTS**

May 06 1998

Word Count: 3,363

**4/8/376 (Item 1 from file: 459)**

00015210

COMPANY PROFILE: AQUILA BIOPHARMACEUTICALS

February 27, 1998 (19980227)

?logoff hold

Table 1

62

AGAAGCCTATTGGAATGGGAAGCAGGGATCTCGTCCTTCTTCAAGTTCTAGTTATAATGCAAAATCCAGC  
TCAACCAAGATTGTCAGAGAACCACAATCTGACTGTCACTCCAACTTATCATCAAAATCAAGGGGAAAA  
CATTTCAAGCCTTTTACGTGAATTGTATGCTAAACCCTTATCAGAACGCCATGTGGAATCTGATGGCCT  
TATTTTCGACCCAGCGCAAATCACAAGTCGAACCGCCAGAGGTGTAGCTGTCCCTCATGGTAACCATT  
CCACTTTATCCCTTATGAACAAATGTCTGAATTGGAAAAACGAATTGCTCGTATTATCCCCCTTCGTTA  
TCGTTCAAACCATTGGGTACCAGATTCAAGACCAGAACCAAGTCCACAATCGACTCCGGAACCTAG  
TCCAAGTCCGCAACCTGCACCAAATCCTCAACCAGCTCCAAGCAATCCAATTGATGAGAAATTTGGTCAA  
AGAAGCTGTTGAAAAGTAGGCGATGGTTATGTCTTTGAGGAGAATGGAGTTTCTCGTTATATCCCAGC  
CAAGGATCTTTCAGCAGAAACAGCAGCAGGCAATTGATAGCAAACCTGGCCAAGCAGGAAAGTTTATCTCA  
TAAGCTAGGAGCTAAGAAAACCTGACCTCCCATCTAGTGATCGAGAATTTTACAATAAGGCTTATGACTT  
ACTAGCAAGAATTCACCAAGATTTACTTGATAATAAAGGTCGACAAGTTGATTTTGAGGCTTTTGATAA  
CCTGTTGGAACGACTCAAGGATGTCNCAAGTGATAAAGTCAAGTTAGTGGANGATATCTTGCCTTCTT  
AGCTCCGATTTCGTATCCAGAACGTTTAGGAAAACCAATGCGCAAATTACCTACACTGATGATGAGAT  
TCAAGTAGCCAAGTTGGCAGGCAAGTACACAACAGAAGACGGTTATATCTTTGATCCTCGTGATATAAC  
CAGTGATGAGGGGATGCCTATGTAACCTCCACATATGACCCATAGCCACTGGATTAAAAAAGATAGTTT  
GTCTGAAGCTGAGAGAGCGGCAGCCAGGCTTATGCTAAAGAGAAAGGTTTGACCCCTCCTTCGACAGA  
CCATCAGGATTCAGGAAATACTGAGGCAAAAGGAGCAGAAGCTATCTACAACCGCGTGAAAGCAGCTAA  
GAAGGTGCCACTTGATCGTATGCCTTACAATCTTCAATATACTGTAGAAGTCAAAAAAGGTTTAAAT  
CATACCTCATTTATGACCATTACCATAACATCAAATTTGAGTGGTTTGACGAAGGCCTTTATGAGGCACC  
TAAGGGGTATACTCTTGAGGATCTTTTGGCGACTGTCAAGTACTATGTGCAACATCCAAACGAACGTCC  
GCATTTCAGATAATGGTTTGGTAACGCTAGCGACCATGTTCAAAGAAAACAAAATGGTCAAGCTGATAC  
CAATCAAACGGAAAAACCAAGCAGGAGAAACCTCAGACAGAAAAACCTGAGGAAGAAACCCCTCGAGA  
AGAGAAACCGCAAAGCGAGAAACAGAGTCTCCAAAACCAACAGAGGAACCAAGAAATCACCAGAGGA  
ATCAGAAGAAACCTCAGGTGAGACTGAAAAGGTTGAAGAAAACTGAGAGAGGCTGAAGATTTACTTGG  
AAAAATCCAGGAT

**SP042 amino acid (SEQ ID NO:66)**

CSYELGRHQAGQVKKESNRVSYIDGDQAGQKAENLTPDEVSKREGINAEQXVIKITDQGYVTSBGDHYH  
YYNGKVPYDAIISEELMKDPNYQLKDSDIVNEIKGGYVIKVNKYYVYLKDAHADNIRTKKEIKRQK  
QERSHNHNSRADNAVAARAQGRYTTDDGYIFNASDI EDTGDAYIVPHGDHYHYIPKNELASELAAA  
EAYWNGKQGSRPSSSSSYNANPAQPRLSNHNLTVTPTYHQNQGENISSLLRELYAKPLSERHVESDGL  
IFDPAQITSRTARGVAVPHGNHYHFIPIYEQMSELEKRIARIIPLRYSNHWVPDSRPEQSPQSTPEPS  
PSPQFAPNPQFAPSNIPEKLVEAVRKVG DG YVFEENGVSRYIPAKDLAETAAGIDSKLAKQESLSH  
KLGAKKTDLPSSDREFYNKAYDLLARIHQDLNDKGRQVDFEALDNLRLKDVXSDKVKLVXDILAF  
APIRHPERLKGKPNQITYTDEIQVAKLAGKYTTEDGYIFDPRDITSDGDAYVTPHMTSHWIKKDSL  
SEAERAAAQAYAKEGLTPSTDHODSGNTEAKGAEAIYNRVKAAKKVPLDRMPYNLQYTVVEKNGSLI  
IPHYDHYHNKIFEFWDEGLYEAPKGYTLEDLLATVKYVVEHPNERPHSDNGFGNASDHVQRNKNQADT  
NQTEKPSSEKPPQTEKPEEETPREKPPQSEKPEPKPTEEPEESPEESEEPQVETEKVEEKLREAEDLLG  
KIQD

**SP043 nucleotide (SEQ ID NO:67)**

TTATAAGGGTGAATTAGAAAAAGGATACCAATTTGATGGTTGGGAAATTTCTGGTTTCAAGGTAAAAA  
AGACGCTGGCTATGTTATTAATCTATCAAAAGATACCTTTATAAAACCTGTATTCAAGAAAATAGAGGA  
GAAAAAGGAGGAAGAAAATAAACCTACTTTTGATGTATCGAAAAAGAAAGATAACCCACAAGTAAACCA  
TAGTCAATTAAATGAAAGTCACAGAAAAGAGGATTTACAAAGAGAAGAGCATTCACAAAAATCTGATTC  
AACTAAGGATGTTACAGCTACAGTTCTTGATAAAAAACAATATCAGTAGTAAATCAACTACTAACAATCC  
TAATAAG

**SP043 amino acid (SEQ ID NO:68)**

YKGELEKGYQFDGWEISGFEGKKDAGYVINLSKDTFIKPVFKKIEEKKEENKPTFDVSKKKDNPNQVNH  
SQLNESHKREDLQREEHSQKSDSTKDVATVLDKNNISSKSTNNPNK

**SP044 nucleotide (SEQ ID NO:69)**

GAATGTTCAAGCTCAAGAAAGTTCAGGAAATAAAATCCACTTTATCAATGTTCAAGAAGGTGGCAGTGA  
TGCGATTATCTTGAAAGCAATGGACATTTTGCCATGGTGGATACAGGAGAAGATTATGATTTCCAGGA  
TGGAAGTGATCTCGTATCCATGGAGAGAAGGAATTGAAACGTCTTATAAGCATGTTCTAACAGACCG  
TGCTTTTCGTCGTTTGAAGGAATTGGGTGTCCAAAACTTGATTTTATTTGGTGACCCATACCCACAG  
TGATCATATTGGAATGTTGATGAATTACTGTCTACCTATCCAGTTGACCGAGTCTATCTTAAGAAATA

1157

TGTCAGAATT AACATCTCCA AACGCTGTTC TTGAATCGGT CATTCTGATA CCATTTTCTG 10200  
CACAAATAAC CAATACACGA TTATAGGCTT CTGTAGATTT AACCACTATA TACAATTCAA 10260  
TCATTTTAGA ACGATTTTGC AGATATTTT TTAGTGGTTG GAACATGGAT ATCACACCCC 10320  
AAACAGAAAT GGCTACTAAA AGAGCTCCCT CATAAGG 10357

## (2) INFORMATION FOR SEQ ID NO: 192:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 6867 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 192:

CGGGACATTC TCAATCTTCT GTCTTTTGT TTTCTCTTCT TTCTATGATA CAATGGAAAA 60  
AATAAATCA AAAGGAGTTT TTTTATGACT TATCCAAATC TCTTGGACCG CTTCTTAACC 120  
TATGTTAAGG TCAACACGCG CTCTGATGAA CACTCTACTA CTACTCCAAG TACACAGAGT 180  
CAGGTTGACT TCGCAACAAA TGTCCTAATT CCTGAAATGA AACGTGTTGG ACTGCAAAAT 240  
GTTTACTATC TACCGAATGG TTTTGCTATT GGAACCTTGC CAGCCAACGA TCCGTCTTTA 300  
ACACGTAAGA TTGGTTTAT ATCGCACATG GATACTGCTG ATTTTAATGC TGAAGGAGTC 360  
AATCCACAGG TAATTGAAAA CTACGATGGT GGTGTGATTG AACTAGGGAA TTCTGGTTTC 420  
AAACTCGATC CAGCTGACTT CAAGAGTCTT GAAAAATATC CAGGACAAAC GCTCATCACA 480  
ACAGATCGAA CAACCTTGCT AGGTGCTGAT GACAAGTCAG GAATTGCTGA AATTATGACA 540  
GCCATTGAAT ATCTAACTGC TCATCCTGAA ATTAAGCACT GTGAGATTCG TGTGGGTTTT 600  
GGTCCAGATG AAGAAATCGG TGTGGTGCC AATAAATTTG ATGCAGAAGA TTTTGATGTG 660  
GATTTTGCTT AACTGTGTA TGGTGGTCCA CTAGGTGAAC TTCAGTACGA GACTTTCTCA 720  
GCCGTGGTG CTGAATTGCA TTTCCAAGGT CGTAATGTCC ACCCTGGTAC TGCCAAAGGG 780  
CAGATGGTCA ATGCCCTTCA GCTAGCAATT GATTTTCATA ATCAACTTCC AGAAAATGAC 840  
CGACCTGAGT TAACTGAAGG TTACCAAGGT TTTTACCATC TAATGGATGT GACAGGTAGT 900  
GTTGAGGAGG CGCGTGCAAG CTACATCATT CGTGATTTT AAAAAGATGC CTTGAAGCG 960  
CGTAAAGCAT CCATGCAATC TATCGCTGAT AAGATGAATG AAGAACTGG GAGCGACCGT 1020  
GTCACTCTCA ACTTGACAGA CCAGTACTAC AATATGAAAG AAGTCATTGA AAAAGATATG 1080  
ACTCCAATTA CCATTGCTAA AGCCGTTATG GAAGATCTAG GTATCACGCC TATTATCGAA 1140

1158						
CCAATCCGGG	GTGGAACAGA	CGGCTCTAAG	ATTTCCCTTA	TGGGAATCCC	AACTCCGAAT	1200
ATCTTTGCAG	GTGGCGAAAA	TATGCACGGA	CGTTTTGAAT	ACGTTAGCCT	TCAGACTATG	1260
GAACGTGCAG	TTGATACCAT	CATTGGCATC	GTAGCTTATA	AAGGCTAAAA	AGACGAGGTA	1320
GCTCAGCTAC	TTCGCCTTTC	TTTTTATTCT	ACTGGTTTTT	CTTGATTTC	AGTAGTTGTA	1380
GAAGATTCTG	TTGTTTCATT	TTCTGAAGTT	GATTCAGCAG	GTTTAGAATC	TCTTGTATTG	1440
CTTGTTTTGT	TTTCGTCGCT	AGCAGTTTCA	ATGTTAGATT	CTGCAGTTGC	GTTTGGTTGG	1500
TTCTCAGCAC	TGGTGTATC	ACCATTTGCT	TCAGCATTC	TTGCTGGACT	TGTTTCTTCA	1560
CTTGCGCTAG	CTTTTGACTG	GATTTGATGA	TTCAAAACTA	GAATAGCTTT	TGTCGATTCA	1620
AGTAAAGCTG	TTTTGTCTTT	ACTCTTAGCA	GAAAGTTGAT	CTAATAATGC	ATCCACCTTA	1680
TCAAAGTCCG	CATCAGATCC	ATTATTACTT	TCTAAATAAG	AGTGAAGCGA	CATGAGAATA	1740
TCGTAGAGTT	TTTGATAGAG	TACAAGTGTC	TGAGGATCTT	GCTCAGCATT	TTCCTTTTCT	1800
TGTTGAAGGG	CGCTAGCGAT	ACGAGTCAAG	ACATCTTTTA	CCTGACTGTT	TACTTCATCC	1860
AAGCTGCAT	CAGCCTTGTT	TGTGGCAGCT	TTTAGATTTT	CTACTTCTTC	TGCCAAGGAT	1920
TGTCTGATTC	CTTCTTCATG	GATTTGTTCC	AAGAGTTGAT	TTGCCTTGCT	CAAAAGACTT	1980
TCTACTTCTT	CCTTGCTATC	TGTCGCAGAT	TATTGGTTGC	TATCTACCAT	GTACTCCTAA	2040
AACAGGAGAG	TTATAATCCA	AGATTACAAG	GCCTTACAGA	AATAAGAAAT	CCAGATAAGA	2100
CAATGTTGCT	CCAAGACGCT	ATTCGCTTCG	CACAGCAGCA	CGGATTCAAT	ATGCTTTAAT	2160
TTTAAAGTTT	AGGTGTCAAG	ACCTCTTTTT	AGTGTGCCCA	AAATTTAGAG	AAGTAATCAA	2220
TCAACTAACT	TTTATTTTTT	TCAAACCTTC	AGTAACTGA	CCTAAAGCTA	ACTCAATCTG	2280
TCTTTGTAGA	TGCTTCTGCT	ATCAGCTAGA	AGTTGATCTA	CTTTTGCCAA	GACTGCCTTC	2340
TCATCAAAAG	TTCCAGGTTG	ATAGTTGGAT	TGCAGGGATG	GAATCTTGTT	TTTCAAAGCC	2400
GCTTCATATC	CCTTAGTTTG	AACCTTGATG	TAGTGATTGT	GGTCGCCATG	AGGAATCACA	2460
AAACCTTCTG	AATCTTCACT	TATAATTCGA	TTGGCATCAA	AACCATGACC	ATCTTCTTCC	2520
TCATGATGGA	CATGTAGTGA	CGGATTACTT	AATACAGAAC	TAGAAGAACT	TCCTACCTCT	2580
TCCGTGTTAG	AGTGTGATGG	GGGATTGTTA	AGAGATGACT	TAGGAATATA	GTGATAGTGA	2640
TCCCCATGTC	TTACTATATA	AGCATCACCT	GTATCTCTGA	CAATATCATT	AGGGTTAAAG	2700
ACATATGTGG	CTGCTAATTC	ACCTGCCGAC	AAGTCACTCT	CAGGAATGAA	ATGATAGTGA	2760
CCACCATGTG	GTACTATAGT	AGATTGAAAT	AGAATATGAG	CAAATTGATA	AGGGGATTTT	2820
AAAGTAATTT	CTAACAATGA	TTTAGAAACT	ATGATGTGCT	ATTCTAAATT	CAACTCACTA	2880
TATATAACCA	TCATCGGTAG	TATAACGTCC	CTGTAATTTT	GCTACAGATA	CTTCTGCACT	2940



1159

AGCTCCTTTA TCGTCTTTAC CATGTTCTTG TTTTGGCGA TTGATTTCAT CTTTGTTCG	3000
TACATTTTCT GCATGAGCTT GATCTTTAAG GTAAACATAA TACTTTCCAT CTACCTTAAT	3060
AATATATCCT CCCTTAACCT AACTGACGAT ATCTTGATCT TTCGGCTGAT AGTTGGGGGC	3120
TTTCATTAAT AGCTCTTCAC TAAAGAGCGC ATCAAAAGGA ACTTTACCAT TATAGTAGTG	3180
ATAATGATCG CCATGAGAAG TTACATAACC TTGATCTGTA ATCTTAATAA CAATTGTGTT	3240
TGCTTGAATT CCTTCTTTT GACTAACCTA GTCTGGAGTC AAATTTTCAG TCTTCTTAGT	3300
GTCTTTATTA CTGTTTACAT ATGAAACACG ATTTTATCT GTATTGGCCT GTTAGCTATG	3360
TTGGTTCAGA GCATAAACAC ACAGACTTAA GGAAAGGATA ACAACAGATC CAGCTGCTAT	3420
ATATTTCTTT TTAAATTCA TAATTACCTC ATTTCTATAA TTATTTATAT GATGCTTCA	3480
TTATTAATG ATTAATAAA TTAATTAACC AATTAATTAA CTAGTAAATA TTCCACCTCT	3540
TTTTAAGTTG TATGCAAGA AATTTATAT ATTAATAATA AAATGAAAT CTCCCAAAGT	3600
CAGAGTTTA TTTCTAECTT TTGAGAGAAC TTCATTTTG ATTCAGACTT TTTCTACTGC	3660
TATTCCTTAC GCTATGAGAT CAGATAAAT CTTTTTATC ACTTCTCCAC TTGGCAATCT	3720
TAATTCATC GTTCCATCCA TATTGAATAT AACACTATCT AAGCCTAATC CGTAACTAGC	3780
TGTAAATTT TCTAATTTT CTGTACAGG ATCTACTGCT GGAGCTTCCT CTAATGCTGG	3840
ATCTAACATA GGGTCACTCC CCACATCCC TTCTGGATTC AACATTCCAT TATCCGTTGA	3900
GTTTCTGGT TTTACAGGT TTTCTGTTG TGCCTCTGGT AAAGAATCTG CTGGTTTATT	3960
TTCTGTGGT TGGTCTCAA CTGTTCCAGT AGATACTTT CCATTTTCAG ATGGTTTATT	4020
TTCAACATTT CCTTGAGGT CTCTCCTGT AAAATCTGCC ATATTCTTT TAATGACTTC	4080
TCCCGATGGT AAATATAATT CAATTGTTCC GTCCATATTA AACAAGACAT TTTCTAGCTT	4140
CATCCCATAA CTTTCAGCAA ATTTTGCTAC TTTTCTTGT ACAGGATCCA CTGTAGGAAC	4200
TTCTCTAAC GTTGAATTAC TAGTACTATT CCCAGTTCA GAAAGTTTT CTTTCTCTAC	4260
CTTCTCACTA GTCTTTGGT CTCTACCTT TTCATCAAGT TTAAAGTTT CTGTGCTTT	4320
ATTCCTTTTA AATTGTGGT GAATACTTG TTTATCAGT TGATTTTCTT TTTCCAAGAT	4380
AGTACTTCC ACAATATAAG TCGATTGATT GTCCAAATAA GCATTTGCCA TGAAGGTAC	4440
AGGAATTTA TTTCCGGCCG TTCTGGTGT TCCTGGTTT AATTTCGGAA TCGGTAATTT	4500
GATTCACCA ACTTTATAGT TATTTCTAA ATAAGCATTT CCATGAAAT CATCAAACAC	4560
TCTGACTAAA GCATCAGTTC CTTTAGGCAC TGCAAAATGA GGGTCACTC TTAATAAGT	4620
ATCCCCTGCA TGGAAAGGAT AGAAAATCGT TTGACTGGCC ATTTTGTAAG CTAAGAGGT	4680

1160

TGGAACCTGTA AATGTACCAT CATAACTTAC TTCTGGATAA TCTTTTGAAG CGATAGTATA	4740
CTTAAATGTT TGTCCCTGGTA AATAAGGTTG ATCTAATTCA AAGTTTGCAA TATCCCTAC	4800
TCCTTCTCCA AATACTTTAC CAGATACTTT CTCCAATACT TTTCCATCTG GTGTTATTAA	4860
TTTACTAGC ATATTGATAC CTAATTTTTT CTCCAATTCA GGCGGAAAAC TAAAAGAAAC	4920
GCGTTTTTGA CCATTGGCTA GAGTAAAGTT TTGATTATTA AACGTACTAT TTTTAAACA	4980
ATTAACAACA TTCGTTAAT CTCTCCAGT ATAAACTTTA TTCCCTTCTT TTTTAGCAAC	5040
TCCTTCTTCG GGTTTAAACA GTTCATAGTT ACTGTGAGAA TGACCAATTC CAACCGGTTT	5100
ATGTTTCATCA ATCGGATCTG CATGATGGTG ATCTCCATGC GGATAAATAA TCGCATTTTT	5160
TTCTTTATTC ACGACAATAC TTTCACGTTT GACACCATAT TGTTTCATAA TGCCAGCAAT	5220
TTTTTCTTCG ATTTTTTTAT CTAATCTTTT CATTTCTTTG GCATTACTTG GATAATCCTG	5280
TTCATGAGAT GACAAAGAAT CTAATCCATT ATGACTAGTT TTAAC TTCCT CTAATGTTT	5340
TTGCGCAsCT TAATTGCTC TTCTGTCAAG TCCTTCTTGA AGAAATAATG ATTGTGGTCT	5400
CCGTGACTCA TGACAAAACC TGATTCATCT TCAGCGATAA TACGATTAGC ATCAATCCG	5460
TATCCATCTT CTTCATGTTT CTCATGTGAA GTTCCTGGAT TGATTGGAAG AGATGGAGAA	5520
GGTGTGCTA GACTATTGTT TGGAAGAGTC GGTTCGCCAA TTTGATTGA TTTTGAATG	5580
TAATGGAAAT GATCACCATG TCTTACAATA TAAGCTGTAG CCGTTTCTTC AACGATATCT	5640
TTTGGATTAA AAATATAACC ATCAGATGCT GAAGAGAGCT CCTTACTTGT CGTTAAAGAA	5700
GAAGGATTGC TTGAAAGACT GCCTAGACTA GACACTACTT CATTAGGTTT TGCATTGTGA	5760
GAAACTGTAG AACCAGTTCC ACTGATAGGC ACCATTCTGG CAATCTTTTC TTCTAAGGCA	5820
GAAAGCTTGC TGTAAGGAAT AAAGTGGTAA TGGTCGCCAT GCGGAATCGC AACTCCATTT	5880
GGTGTACGAC TGATAATCTT AGCAGGGTCA AAGACCAGGC CATCTGATTC ACTGTAACGT	5940
TGGGCGCTAG GTGAATCATA GAGTTCCTTC AAAAGACTCT GGAGATTTTC AGATTTATTT	6000
GCTGGCTTGC TAGTTGATCC TTTTGCTACA GATTGCGTGT TATGTCACT AGCTGTTGAA	6060
GAATAGCTTA ACTGACTCGG TTGCATATTT TTTCCAGCCA GATGTGCTTT AGCTGCTGCT	6120
AATTCACTAG CAGATAAATC GCTTTTGGGA ATGTAGTGAT AGTGACCTCC ATGAGGAACG	6180
ATATAAGCAT TACCCGTATC TTCGATAATA TCAGCTGGAT TAAAGACATA ACCATCATTT	6240
GTCGTATATC GTCCCTGAGA CCTTGCTACA GCAACATTAG AGTTAACCTT CTCATTATCT	6300
TTGACATGTT CTGTGTTTTG ACGATTGATT TCATCTTTAG TTCGAACATT ATCAGCATGA	6360
GCTGCATCTT TCAGGTAGAC ATAATATTTT CCATCGACCT TGATGATATA ACCACCCCTG	6420
ACTTCATTGA CAATATCAGC GTCTTTAAGT TGATAGTTTG GATCCTTCAT CAAGAGTTCT	6480

1161

TCACTAAAGA GGGCATCATA AGGAACTTTC CCATTATAGT AATGATAGTG GTCACCGTGT	6540
GACGTTACAT AGCCCTGATC TGTAAATTTG ATTACAATTT GCTCAGCCTG AATTCCTTCT	6600
TTCTGGCTAA CCTGGTCTGG TGTCAAGTTT TCACTTTTCT GACTTGACTG GCTGCCATCC	6660
ACATAAGAGA CACGATTATT GTCCTTATTT TCCTGCGAAC GATGCTGGTT TAGTGCATAG	6720
GCACATAGAC TCAAGGATAC GATAACAGCT GATCCAGCTG CTATATATTT TTTACTAAAT	6780
TTCATAAATC CCTCATTTCA ATAAATGATG AAGTTTTTTC TCAACTTCTT TTTACTTTATT	6840
AAATAGTTTT CTAAACCCGG GGGTACC	6867

(2) INFORMATION FOR SEQ ID NO: 193:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 999 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 193:

CGTTCTAAAA ATGCAGTACG TTTGATTGAG AAATCAGTTA AAGGTATGCT TCCACACAAT	60
ACACTTGGAC GCGCTCAAGG TATGAAGTTG AAAGTATTTG TTGGAGCTGA GCACACTCAC	120
GCTGCACAAC AACCAGAAGT TCTTGACATT TCAGGACTTA TCTAAGGAAA GGAACAATAA	180
AGTATGTCAC AAGCACAATA TGCAGGTACT GGACGTCGTA AAAACGCTGT TGCACGCGTT	240
GCGCTTGTTT CAGGAACTGG TAAATCACT GTTAACAAAA AAGATGTTGA AGAGTACATC	300
CCACACGCTG ACCTTCGTCT TGTCAATCAAC CAACCATTCG CAGTTACTTC AACTGTAGGT	360
TCATACGACG TTTTCGTAA CGTTATAGGT GGTGGATACG CTGGTCAATC AGGAGCTATC	420
CGTCACGGTA TCGCTCGTGC CCTTCTTCAA GTAGACCCAG ACTTCCGCGA TTCATTGAAA	480
GCGCAGGAC TTCTTACAG TGAATCAGT AAAGTTGAAC GTAAGAAACC AGGTCTTAAG	540
AAAGCTCGTA AAGCATCACA ATTTAGTAAA CGTTAATTCG AAAGAATTAC TATACTTATA	600
CAGAGCACCT TTCGGGGTGT TCTTTTCTTA TACTTTCTTA CTAAATTGGT GCAATTGACA	660
CAGTTGTTGC GACTTTAGTC GCTTACAAAT GTGGCTGCAA CCTGACATGG TCAGTTGCCT	720
CAAAACGTTA ATCAATACGA TTATATCAAC GTTCAAAGC ACTCAAGGCT TTACCCTATG	780
GGTGCTTTTT TCTATACTTT CTAAAAAGT TTACCCTAAA ATTTGCCCTA AAATTACCCT	840
ACTTATTTTT AAGATGTTGG TAGGCAACTT GTCCAGCAGA TAATGGAAT ATGTTTGAAG	900
TATTAACATA AGTCTTAGTT GTAACGGTAT CGCTATGAGT TAATGCTTCA GAAATGGCTT	960

727

GCTGCTGGAC TAGCTGCTTC ACCATTGTTT TTAGGATAGT CAGAAATATA GCTTAATTTT	9780
CCAGTCCATT TTTTATCAGG ATACACTTTA GAAGTAAAGC TTACTTCTTG ACCTACAGAA	9840
AGGTTGGCTA GATTGTACTC AGACAATTCT CCCTTGACTT GTAAATTTTC ATTGCTGACA	9900
ATATGAACCA TAACTTGACT CGCCCTGTT GGAGATTAG AACATTGCT ATTGACTTCG	9960
ACCACAGTTC CCTCTAGGGT ACTGAGAACA GTTGTTCAT CCAATTGACT TTGAGCCTTG	10020
CTTAATTGCG CCGCAGCATC TGCACGCGCA TCACGGGCAT CACCCAATTG AGCGTCAATA	10080
GAAGCAACAG AATTTCAGC CACTGGAGTT GGGCTTTGCA CCGTTGCATC TTCTCCTCCT	10140
ACTGGCGCTG GTAAGTGTGG AGCCGGAGCT GAAGCGGCTT CATTCGTGC TTGATTGAGT	10200
TCATTGATAT GACGATCTGC CCTAGCTACT GCTCGACTAG CTGAATCATA GGCCGCCTGC	10260
GCTTCTGAAC TACTGTACTT GACTAAAGCC TGCCCTTCGC TGACCTTATC GCCCACAGAA	10320
ACAAGGATTT CATCTAAATC ACCCTTACTA GCATCAAAAT AAACATATTG TTCATTTTTT	10380
GCTGTACTG TCCCTGACAA TAAACAGAG GAGGCCACGC TTCCTTCCTT GGCAACAACA	10440
AGATGAGTAG GCTCATCTTT TAGAGCAGTC TGAGAAGGTT GTCTAAAGAG TAAATCCCC	10500
CCAGCACCCA ATACAACTAC ACTCGCAGCA CCGATTGCTG CATAAGTTG CCACTTTTTA	10560
GCTTTACCAT TCTTTTCTT CATAATGAAA CTCCTTTTCT TTTTACAAT ACTTTGCTAT	10620
TATACCAAAT TTCCTCCAG CAAACAATAC AGTTCAGGAT TAAACAATCG TTCGGAATT	10680
TGCTTTTCGG	10690

## (2) INFORMATION FOR SEQ ID NO: 94:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 8195 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 94:

GAGAAAGCGC CCACGTTTCC CCGAAGGGAG AAAGGCGGAC AGGTATCCGG TAAGCGGCCA	60
GGGTCGGAAC AGGAGAGCGC AACGAGGGAG CTTCCCAGGG GGAAACGCCT GGTATCTTTA	120
TAGTCCTGTC GGGTTTCGCC ACCTCTGACT TGAGCGTCGA TTTTGTGAT GCTCGTCAGG	180
GGGGCGGAGC CTATGGAAAA ACGCCAGCAA CGCGGCCTTT TTACGGTTCC TGGCCTTTTG	240
CTGGCCTTTT GCTCACATGT TCTTTCCTGC GTTATCCCCT GATTCTGTGG ATAACCGTAT	300
TACCGCCTTT GAGTGAGCTG ATACCGCTCG CCGCAGCCGA ACGACCGAGC GCAGCGAGTC	360

728						
AGTGAGCGAG	GAAGCGGAAG	AGCGCCCAAT	ACGCAAACCG	CCTCTCCCCG	CGCGTTGGCC	420
GATTCATTAA	TGCAGCTGGC	ACGACAGGTT	TCCCGACTGG	AAAGCGGGCA	GTGAGCGCAA	480
CGCAATTAAT	GTGAGTTAGC	TCACTCATTA	GGCACCACAG	GCTTTACACT	TTATGCTTCC	540
GGCTCGTATG	TTGTGTGGAA	TTGTGAGCGG	ATAACAATTT	CACACAGGAA	ACAGCTATGA	600
CaTGATTACG	AATTCGAGCT	CGGTACCCGG	AAAATCCAGA	AAATGCTTGA	AAAAAATCCT	660
AGAAGATGGT	ATAATACTAA	ATTGTAAGGG	TTATCACATA	TAACTCAAAA	AAAGAAAGAA	720
CAAAAGGAGA	GTCAAACAT	GGCTTCTAAA	GATTTCACG	TAGTGGCAGA	AACAGGTATT	780
CACGCACGTC	CAGCAACATT	GTTGGTACAA	ACTGCTAGCA	AATTTGCTTC	AGATATCACT	840
CTTGAGTACA	AAGGTAAATC	AGTTAACCTT	AAATCAATTA	TGGGTGTTAT	GAGTCTTGGT	900
GTGGGCCAAG	GTGCTGACGT	AACTATCTCA	GCTGAAGGTG	CAGATGCAGA	TGACGCTATC	960
GCTGCAATCT	CAGAAACAAT	GGAAAAAGAA	GGATTGGCAT	AAGGGAATG	ACAGAAATGC	1020
TTAAAGGAAT	CGCAGCATCT	GACGGTGTG	CAGTTGCAAA	AGCATATCTA	CTCGTTCAAG	1080
CGGATTTGTC	ATTGAGACT	ATTACAGTCG	AAGATACTAA	CGCAGAAGAA	GCTCGCCTTG	1140
ATGCCGCTCT	ACAGGCATCA	CAAGACGAGC	TTTCTGTTAT	TCGCGAGAAA	GCAGTAGGTA	1200
CGCTCGGTGA	AGAAGCAGCT	CAAGTTTTTG	ATGCTCACTT	AATGGTTCCT	GCTGACCCAG	1260
AAATGATCAG	CCAATCAAG	GAACTATCC	GTGCGAAGAA	AGTGAATGCA	GAAGCAGGTC	1320
TGAAGAAGT	TACAGATATG	TTTATCACTA	TCTTTGAAGG	CATGGAAGAC	AACCCATACA	1380
TGCAAGAACG	CGCAGCGGAT	WTCCGCGACG	TGACAAAACG	TGTATTGGCA	AACCTTCITG	1440
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TCACTGGAGA	AGTGATTATC	AACCCAACAG	ATGAACAAGC	GGCAGAATTT	AAAGCAGCTG	1740
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ATTCTCAAGA	CTTCCCAACT	GAAGATGAGC	AGTATGAAGC	ATACAAGGCT	GTTCTTGAAG	1980
GAATGAACGG	TAAACCTGTT	GTCGTTGCTA	CAATGGATAT	CGGTGGAGAT	AAGGAACTTC	2040
CTTACTTCGA	TATGCCTCAC	GAAATGAACC	CATTCCCTGG	ATTCCGTGCT	CTTCGTATCT	2100
CTATCTCTGA	GACTGGAGAT	GCTATGTTCC	GCACACAAAT	CCGTGCTCTT	CTTCGTGCGT	2160

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CTGTTACCGG TCAATTGCGT ATCATGTTCC CAATGGTTGC GCTCTTGAAA GAATTCGCTG	2220
CAGCGAAAGC AGTCTTTGAT GAAGAAAAAG CAAACCTTCT TGCTGAAGGT GTTGCAGTTG	2280
CGGATAACAT CCAAGTTGGT ATCATGATCG AGATTCTTGC AGCGGCTATG CTTGCAGACC	2340
AATTTGCTAA AGAAGTTGAC TTCCTCTCAA TTGGTACAAA CGACTTGATC CAATATACAA	2400
TGGCAGCAGA CCGTATGAAC GAACAAGTTT CATACTTTA CCAACCATAC AACCCATCAA	2460
TCCTACGCTT GATTAACAAT GTGATCAAAG CAGCTCACGC TGAAGGTAAA TGGGCTGGTA	2520
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ATGAGTTCTC TATGTCAGCA ACATCTGTAC TTCGTACACG CAGCTTGATG AAGAACTCG	2640
ACACAGCTAA GATGGAAGAG TACGCAAACC GTGCCCTTAC AGAATGCTCA ACAATGGAAG	2700
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TACTCATGAA AGATCCAAAC TATAAGCTAA AAGATGAGGA TATTGTTAAT GAGGTCAAGG	3360
GTGGATATGT TATCAAGGTA GATGGAAAAT ACTATGTTTA CCTTAAGGAT GCTGCCACG	3420
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GCGAGTTGGC TGCTGCAGAA GCCTTCCTAT CTGGTCGAGG AAATCTGTCA AATTCAAGAA	3720
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GTCCTTTATG ATGCCATCAT CAGTGAAGAG CTCCTCATGA AAGATCCGAA TTATCAGTTG	5940
AAGGATTCAG ACATTGTCAA TGAAATCAAG GGTGGTTATG TTATCAAGGT AGATGGAAAA	6000
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GAAGCTGAGA GAGCGGCAGC CCAGGCTTAT GCTAAAGAGA AAGGTTTGAC CCCCTCTTCG	7380
ACAGACCATC AGGATTCAGG AAATACTGAG GCAAAGGAG CAGAAGCTAT CTACAACCCG	7440

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GAGTGGTTTG ACGAAGGCCT TTATGAGGCA CCTAAGGGGT ATACTCTTGA GGATCTTTTG	7620
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GGTAACGCTA GCGACCATGT TCGTAAAAAT AAGGTAGACC AAGACAGTAA ACCTGATGAA	7740
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ACAGAGGAAG AAGCTGAAGA TACCACAGAT GAGGCTGAAA TTCCTCAAGT AGAGAATTCT	7920
GTTATTAACG CTAAGATAGC AGATGCGGAG GCCTTGCTAG AAAAAGTAAC AGATCCTAGT	7980
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AAAGATAATA ACACTATTTC AGCAGAAGTA GATAGTCTCT TGGCTTTGTT AAAAGAAAGT	8100
CAACCGGCTC CTATACAGTA GTAAATGAA TGGAGCATAT TTTATGGAGA AGTAACCTTT	8160
CGTGTTACTT CTCTTTTTTA GAAAAACGTA ACAGA	8195

## (2) INFORMATION FOR SEQ ID NO: 95:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 2004 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 95:

TTTACTAAAA GGAAAAAAGA ACTGATTCTT CAGTCCTTCA TTAATCTTAT TCCACACTAA	60
ATAGGTATGG GTAAACAGGT TGTGACCTT GGTGAATCTC GACTTCAACG TCTTCGAATT	120
CTTCTACGAT TTCTTGAGCG ATTTCAITGG CAAGTTCTTC GCTTCCGTCT TCACCTACAT	180
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GGTGATATC AGGGTTTGAC ACAAGAATTT TTCCATCCAC CATACCTAAA TTATCGTTTT	300
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AGAAGATGAT GTTACGGGCA TTAACCTGTT CAACAGCCTT GATAAAGTCT TCTGTTGAAG	600
GGTTCATGGT TTGACCGCCT TCGATAACAT AATCCACGCC TTGAGAACAG AAGATATCTG	660

National App. No.

PCT/CA 99/01218

## CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/31 C12N15/62 C07K14/315 A61K39/09

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N C07K A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, PAJ, CAB Data, STRAND

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 98 18930 A (HUMAN GENOME SCIENCES INC ;CHOI GIL H (US); HROMOCKYJ ALEX (US); J) 7 May 1998 (1998-05-07) cited in the application SP103; SEQ ID NOs. 181 and 182; page 85, line 14 - line 42; claims 1-21; table I SEQ ID Nos. 65 and 66;	1-12
X	WO 98 18931 A (DOUGHERTY BRIAN A ;HUMAN GENOME SCIENCES INC (US); ROSEN CRAIG A ( ) 7 May 1998 (1998-05-07) SEQ ID No. 192 claims 1-20 SEQ ID No. 94 ---	1-12 ✓
	-/--	

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*B\* document member of the same patent family

Date of the actual completion of the international search

28 June 2000

Date of mailing of the international search report

24.07.00

Name and mailing address of the ISA

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